## 1984] ROGERS, ZINGIBERALES

plants and animals. Chicago. 1969. [M. arundinacea, 184–189; discusses origin of common name, history of the plant in the West Indies, medicinal uses, processing; includes a worldwide list of localities where arrowroot is grown.]

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## ADDENDUM

After this paper was completed, a specimen of *Thalia geniculata* cultivated indoors at the Arnold Arboretum flowered for the first time, allowing us to make the following observations.

In bud, the anther deposits large (ca. 100  $\mu$ m in diameter when fresh) pollen grains onto the style within the cucullate staminode. Possibly functioning as a trigger, the stylar appendage in the open untripped flower rises as a steep uphill floor at the entrance of the floral tube. The pollination mechanism is extremely sensitive and is easily sprung by various minor disturbances. After being (artificially) triggered, the style twists and comes to rest blocking the floral tube, with the pollen-bearing portion against the outside of a pouch formed by a membrane extending between the callose staminode and the thickened lobe on it. Presence of numerous pollen grains in the stigmatic cleft suggests that self-pollination can occur in the absence of a pollinator during the stroke of the style. Consistent with this possibility, artificially triggered flowers readily formed fruit when bagged in bud or immediately following triggering. (It was impossible to bag flowers singly.) I have not ruled out the presence of pollen in the stigmatic cleft prior to release of the style, other forms of autogamy, or apomixis.

